CLAIM AMENDMENTS

1-32. (canceled)

33. (new): A hybrid formed from formed from a non-ribosomal peptide synthase (NRPS) and a modular polyketide synthase (PKS) said hybrid comprising at least an NRPS domain and at least a PKS extender module,

wherein said NRPS domain is defined as consisting of the amino acid sequence from the N-terminus of an adenylation (A) domain through the C-terminus of a peptidyl carrier protein (PCP) domain; and

wherein said PKS extender module is defined as consisting of the amino acid sequence from the N-terminus of a ketosynthase (KS) domain through the C-terminus of an acyl transferase protein (ACP) domain;

wherein the C-terminus of said NRPS domain is covalently linked to the N-terminus of a intra-molecular linker (RAL) and the N-terminus of the PKS extender module is covalently linked to the C-terminus of said RAL;

wherein said RAL is defined as the amino acid sequence between the C-terminus of an upstream ACP domain and the N-terminus of an adjacent downstream KS domain; said ACP and KS domains occupying adjacent modules in the same reading frame; and

wherein said NRPS domain does not natively interact with any PKS protein;

whereby the RAL effects the transfer of a polypeptide chain from said first module to said PKS module.

34. (new): The hybrid of claim 33, wherein said RAL is selected from the group consisting of M2 *ery*, M4 *ery*, M6 *ery*, M2 *rif*, M2 *rif*, M5 *rif*, M3 *rap*, M4 *rap*, and M7 *rap* intrapolypeptide linkers (SEQ ID NO's: 18-26, respectively).

35. (new): The hybrid of claim 33, wherein said first module comprises the PCP domain of NovH and said second module comprises the KS domain selected from the group consisting of *ery* module 2 and 6.

36. (new): A hybrid formed from formed from a non-ribosomal peptide synthase (NRPS) and a modular polyketide synthase (PKS) said hybrid comprising at least an NRPS domain and at least a PKS extender module,

wherein said NRPS domain is defined as consisting of the amino acid sequence from the N-terminus of an adenylation (A) domain through the C-terminus of a peptidyl carrier protein (PCP) domain; and

wherein said PKS extender module is defined as consisting of the amino acid sequence from the N-terminus of a ketosynthase (KS) domain through the C-terminus of an acyl transferase protein (ACP) domain;

wherein the C-terminus of said NRPS domain is covalently linked to the N-terminus of a inter-molecular linker (ERL) and the N-terminus of the PKS extender module is covalently linked to the C-terminus of said ERL, and

wherein said ERL is defined as a contiguous polypeptide comprising, in order, (1) the amino acid sequence beginning at the C-terminus of the ACP domain of the most downstream module of a first open reading frame and (2) the amino acid sequence upstream of the N-terminus of the most upstream KS domain of a second open reading frame, which second open reading frame is immediately adjacent to and downstream of said first open reading frame; and

wherein said NRPS domain does not natively interact with any PKS protein;

whereby the ERL effects the transfer of a polypeptide chain from said first module to said second module.

37. (new): The hybrid of claim 33, wherein the ERL is selected from the group consisting of M3 *ery*, M5 *ery*, M4 *rif*, M7 *rif*, M8 *rif*, M9 *rif*, M5 *rap*, and M11 *rap* interpolypeptide linkers (SEQ ID NO's: 27-34, respectively).

38. (new): The hybrid of claim 36, wherein said first module comprises the PCP domain of NovH and said second module comprises the KS domain selected from the group consisting of *ery* module 2 and 6.

39. (new): A method to prepare a polypeptide-polyketide which comprises culturing cells containing the hybrid of claim 33.

40. (new): A method to prepare a polypeptide-polyketide which comprises culturing cells containing the hybrid of claim 36.